

**TOP DOOR RAIL**

**"A" Type End Loading Arm**

Make a 1" deep cut-out in hinge edge of door as shown.

**"PT" Type End Loading Arm**

Make a 7/8" deep cut-out in hinge edge door as shown.

Drill or drill and tap holes in top of door as shown.

Position arm in door by placing arm pin in 3/16" hole. Install arm using three 1/4-20 X 5/8" pan head machine screws and lock washers. Center arm in the top rail by adjusting the two 1/4-20 X 1" hex head centering bolts.

**NOTE:** After door is installed, the two 1/4-20 X 1" socket head clamp bar cap screws with lock washers must be tightened securely.

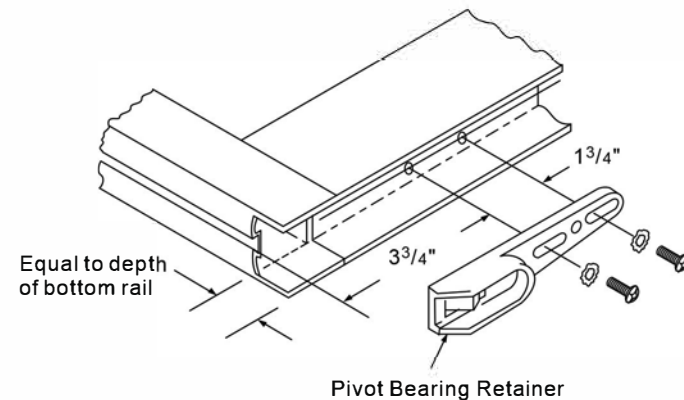
**BOTTOM DOOR RAIL**

**End Loading**

Make cut out in hinge edge of door equal to depth of bottom rail as shown. Drill and tap 1/4-20 holes in bottom rail of door as shown. Install pivot bearing retainer in bottom of door using two 1/4-20 X 5/8" pan head machine screws and lock washers.

Laterally adjust center of pivot bearing retainer 25/8" (or 2 11/16") from hinge edge of door (not including weatherstripping) and tighten screws securely.

**NOTE:** For doors with 1" bottom rail depth, pivot bearing stud must be shortened by sawing off at score 1/2" from bottom.



**TOP DOOR RAIL**

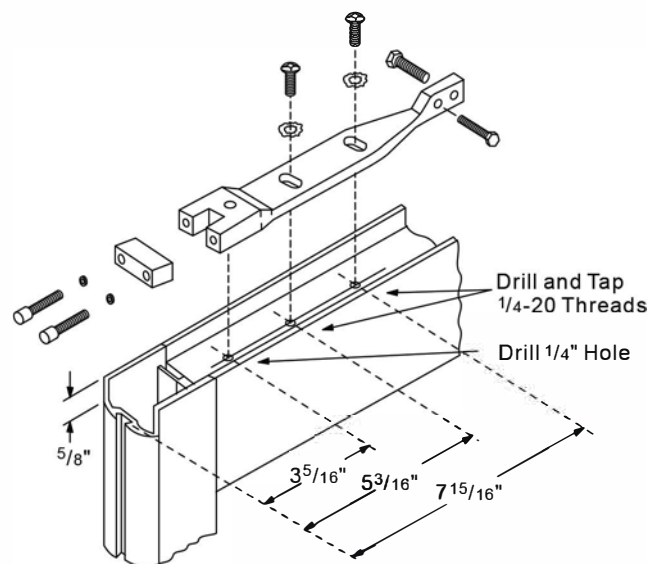
**"K" Type End Loading Arm**

Make a 5/8" deep cut-out in hinge edge of door as shown.

Drill or drill and tap holes in top of door as shown.

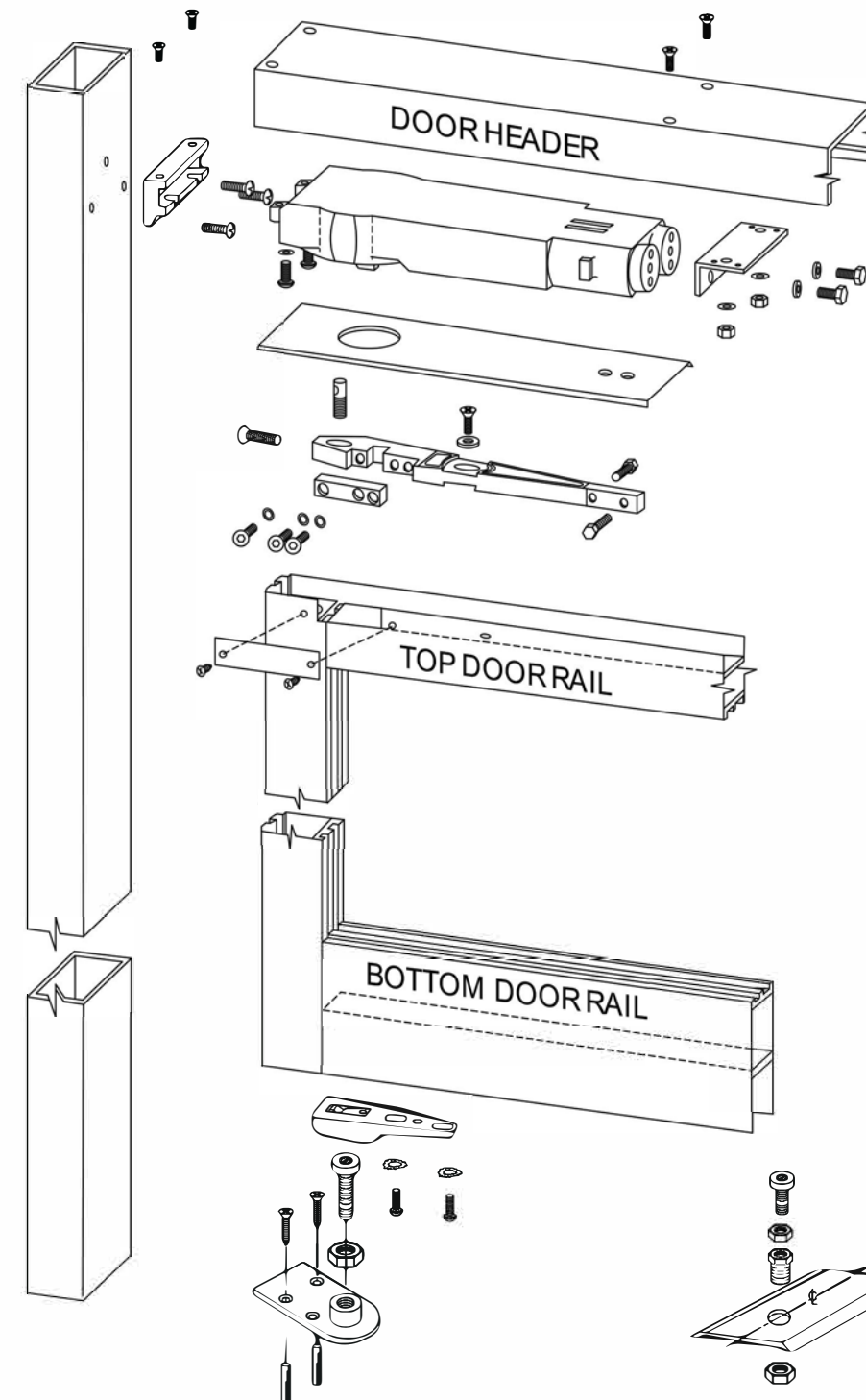
Position arm in door by placing arm pin in 1/4" hole. Install arm by using two 1/4-20 X 5/8" pan head machine screws and lock washers. Center arm in the top rail by adjusting the two 1/4 X 20 X 1" hex head centering bolts.

**NOTE:** After door is installed, the two 1/4-20 X 1" socket head clamp bar cap screws with lock washers must be tightened securely.



**Installation Instructions for All FHC Concealed Overhead Door Closers**

- ◇ CENTER-HUNG FOR DOUBLE OR SINGLE ACTION DOORS
- ◇ SIDE LOADING AND END LOADING INSTALLATION
- ◇ DUAL VALVES FOR LATCHING AND CLOSING SPEED ADJUSTMENT



**IMPORTANT**

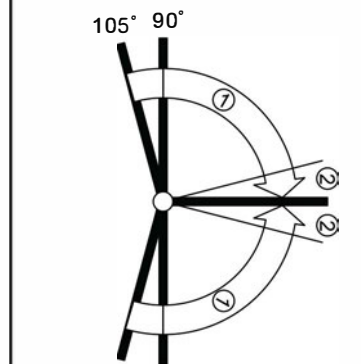
• NO responsibility can be accepted by the manufacturers if these installation instructions are ignored.

• After closer is installed into the DOOR HEADER, do not drill in this area for it may damage closer.

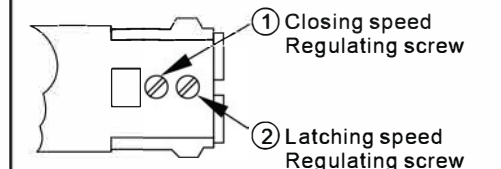
**RECOMMENDED DOOR CLEARANCE**

both of door stiles 1/8" (3mm)  
top door rail 1/8" (3mm)  
bottom door rail 3/16" (4.8mm)

**SPEED ADJUSTMENT**



- ① CLOSING RANGE
- ② LATCHING RANGE



- ① CLOSING / ② LATCHING
- Speed adjustment

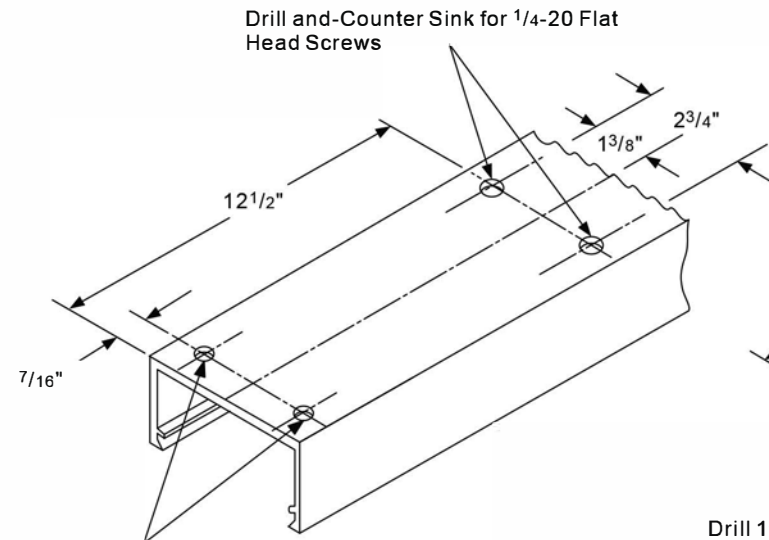


Max. 2 turns in either direction

**HEADERS & JAMBS**

**DOOR HEADER**

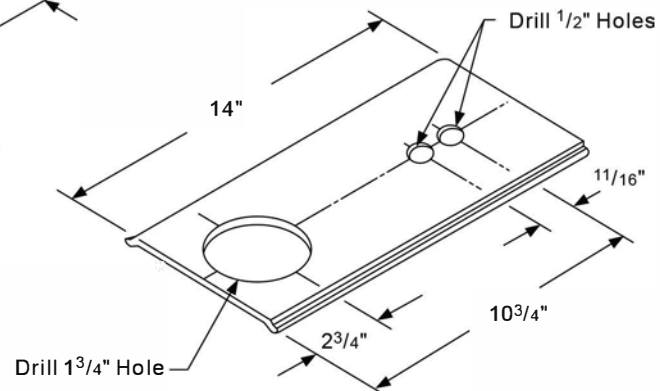
Drill and counter-sink outside top surface for 10-32  $\times$  7/16" and 1/4-20  $\times$  1 1/4" flat head screws as shown.



Drill and Counter-Sink 10-32 Flat Head Screws

**COVER PLATE**

Drill 1 3/4" hole as shown.  
Drill 1/2" hole as shown.

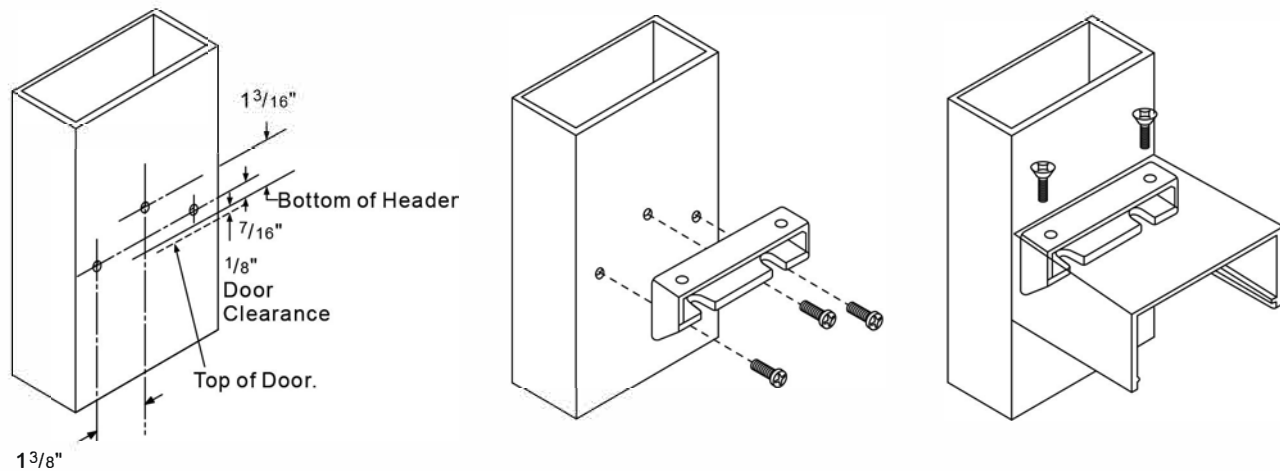


**HINGE JAMB**

Drill holes for #10 pan head self-threading screws as shown.

Install mounting clip using #10  $\times$  9/16" pan head self-threading screws.

Mount door header on mounting clip using 10-32  $\times$  7/16" flat head self-tapping screws.



**SIDE LOADING**

**TOP DOOR RAIL**

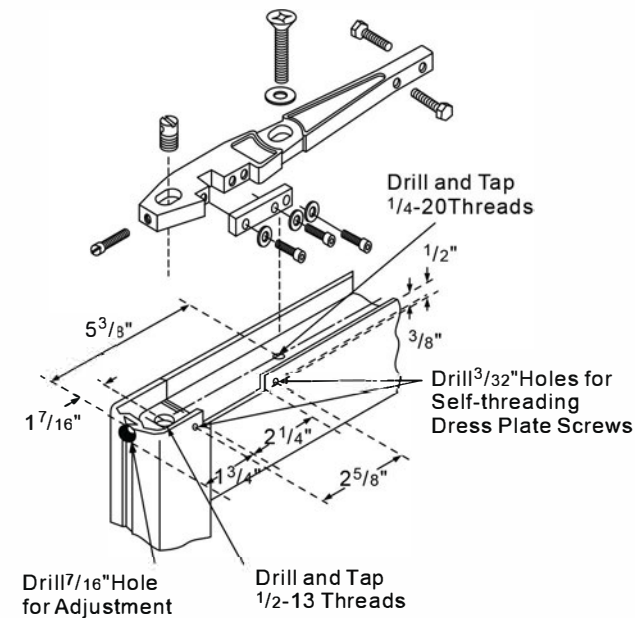
**"S" Type Side Loading Arm**  
Drill or drill and tap holes in top of door as shown.

Make 2 1/4"  $\times$  1/2" cut-out in top of door as shown. Cut-out must be on the inside of the door.

Install arm using 1/4-20  $\times$  1 1/4" flat head machine screw and 7/8" washer. Install 1/2-13  $\times$  3/4" arm stud and 1/4-20  $\times$  1 1/8" dome head arm adjustment screw. Laterally adjust center of the arm spindle retainer 2 5/8" from hinge edge of door (not including weatherstripping). Center arm in the top rail by adjusting the two 1/4-20  $\times$  1" hex head centering bolts.

After installation of door, attach dress plate with self-threading screws.

**NOTE:** Before attaching dress plate, make certain the three 1/4-20  $\times$  7/8" socket head clamp bar screws with lock washers are tightened securely.

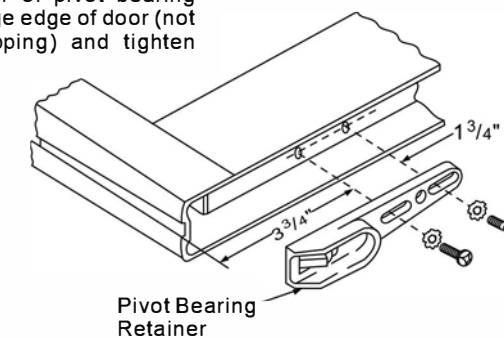


**BOTTOM DOOR RAIL**

**Side Loading**

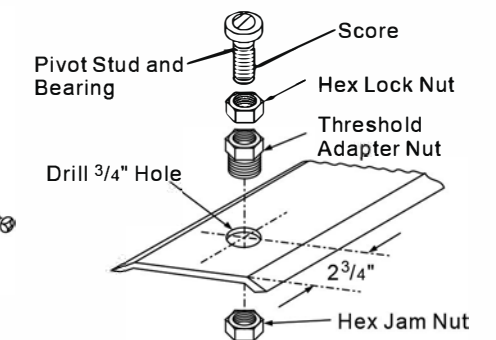
Drill and tap 1/4-20 holes in bottom rail of door as shown. Install pivot bearing retainer in bottom of door using two 1/4-20  $\times$  5/8" pan head machine screws and lock washers.

Laterally adjust center of pivot bearing retainer 2 5/8" from hinge edge of door (not including weatherstripping) and tighten screws securely.



**THRESHOLD MOUNT PIVOT**

Drill hole in threshold as shown. Install threshold adapter nut from top and secure with 3/4-16 hex jam nut underneath. Install pivot stud and bearing with 1/2-20 hex lock nut as shown and adjust bearing height for proper door clearance and firmly tighten lock nut.



**FLOOR MOUNT PIVOT**

Center pivot base against door jamb on hinge side. Mark and drill 1/4" holes 1 1/2" deep in floor for plastic anchors.

Mount base using #12  $\times$  1 1/4" plastic anchors and #12  $\times$  1 1/4" flat head wood screws.

Install pivot stud and bearing with 1/2-20 hex lock nut as shown, and adjust bearing height for proper door clearance and firmly tighten lock nut.

When using threshold, drill 1 1/4" hole for clearance of pivot base on center line 2 3/4" from hinge end of threshold.

**NOTE:** When threshold is not used, pivot bearing stud must be shortened by sawing off at score 1/2" from bottom.

